AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An apparatus for processing a substrate with a plasma, the apparatus comprising:

a first electrode;

a second electrode;

a ~~tubular~~ separating member directly contacting said first electrode and directly contacting said second electrode and forming a sidewall extending ~~between~~ from said first electrode [[and]] to said second electrode, [[and]] ~~said tubular separating member, said first electrode, and said second electrode bounding a processing region,~~ said ~~tubular~~ separating member ~~comprising~~ composed of a dielectric material capable of electrically isolating said first electrode from said second electrode ~~and a first surface exposed to the pressure inside said processing region isolating said processing region from air at atmospheric pressure~~;

a processing region formed by said separating member, said first electrode, and said second electrode;

a process gas port for introducing a process gas to said processing region; [[and]]

a vacuum port in said first electrode for evacuating said processing region to a sub-atmospheric pressure suitable for generating the plasma from the process gas in said processing region;

an electrically conductive shell surrounding said first electrode, said second electrode, and said separating member; and

an atmospheric pressure space between said shell and said first electrode, said second electrode, and said separating member.

2. (Original) The apparatus of claim 1 further comprising:

a vacuum manifold coupled with said vacuum port, said vacuum manifold being electrically isolated from said first electrode and said second electrode.

3. (Original) The apparatus of claim 2 wherein said vacuum manifold includes an enclosed volume proximate to said vacuum port and further comprising:

an insert of an electrically insulating material positioned inside said enclosed volume, said insert including a first plurality of passages coupling said vacuum manifold with said vacuum port.

4. (Original) The apparatus of claim 3 wherein said vacuum port is defined by a second plurality of passages extending through said first electrode and registered with said first plurality of passages.

5. (Previously Presented) The apparatus of claim 1 further comprising:

a vacuum pump coupled with said vacuum port and operative for evacuating said processing region to said pressure suitable for generating the plasma from the process gas in said processing region.

6. (Previously Presented) The apparatus of claim 1 further comprising:

a process gas supply coupled with said process gas port for introducing the process gas to said processing region.

7. (Previously Presented) The apparatus of claim 1 wherein said second electrode includes a plurality of openings arranged in a pattern effective for communicating process gas from said process gas port to said processing region.

8-10. (Canceled)

11. (Currently Amended) The apparatus of claim [[10]] 1 wherein said ~~enclosure~~ shell includes a base and a lid movable relative to said lid between opened and closed positions for accessing said processing region, said lid carrying said [[first]] second electrode for movement relative to said base.

12. (Currently Amended) The apparatus of claim [[10]] further comprising a coolant port in said lid configured for supplying a flow of a coolant fluid to said ~~air gap~~ atmospheric pressure space for cooling said first electrode and said second electrode.

13. (Currently Amended) The apparatus of claim 1 wherein ~~said first electrode includes said vacuum port and~~ said second electrode includes said process gas port.

14. (Previously Presented) The apparatus of claim 13 wherein said second electrode includes a plurality of gas openings coupled with said process gas port, said plurality of gas openings positioned in said second electrode to distribute process gas across a confronting surface of the substrate.

15. (Currently Amended) An apparatus for plasma processing a plurality of substrates, the apparatus comprising:

a first electrode;

a second electrode positioned with a spaced apart relationship relative to said first electrode;

a third electrode positioned between said first electrode and said second electrode;

a first ~~tubular~~ separating member directly contacting said first electrode and directly contacting said third electrode forming a first sidewall extending between said first electrode and said third electrode, ~~said first tubular separating member, said first electrode, and said third electrode bounding a first processing region,~~ said first electrode configured to support one of the

plurality of substrates in said first processing region for plasma processing, and said first ~~tubular~~ separating member comprising a dielectric material for electrically isolating said first electrode from said third electrode ~~and an inwardly-facing surface exposed to the pressure inside said first processing region isolating said first processing region from air at atmospheric pressure~~;

a first processing region formed by said first separating member, said first electrode, and said third electrode;

a second ~~tubular~~ separating member directly contacting said second electrode and directly contacting said third electrode forming a second sidewall extending between said second electrode and said third electrode, ~~said second tubular separating member, said second electrode, and said third electrode bounding a second processing region,~~ said second electrode configured to support one of the plurality of substrates in said second processing region for plasma processing, and said second tubular separating member comprising a dielectric material for electrically isolating said second electrode from said third electrode ~~and an inwardly-facing surface exposed to the pressure inside said second processing region isolating said second processing region from air at atmospheric pressure~~;

a second processing region formed by said second separating member, said second electrode, and said third electrode;

at least one process gas port for introducing a process gas to said first processing region and second processing region; [[and]]

a vacuum port in said first electrode for evacuating said first and second processing regions to a sub-atmospheric pressure suitable for generating the plasma from the process gas in said first processing region and said second processing region;

an electrically conductive shell surrounding said first electrode, said second electrode, said third electrode, said first separating member, and said second separating member; and

an atmospheric pressure space between said shell and said first electrode, said second electrode, said third electrode, said first separating member, and said second separating member.

16. (Canceled)

17. (Currently Amended) The apparatus of claim [[16]] 15 wherein said [[first]] second electrode includes a first process gas port configured for introducing the process gas to said first processing region and said third electrode includes a second process gas port configured for introducing the process gas to said second processing region.

18. (Previously Presented) The apparatus of claim 1 wherein said first electrode is adapted to support the substrate in said processing region.

19-20. (Canceled)